An Investigation of the Relationship Between Psychological Strengths and the Perception of Bullying in Early Adolescents in Schools

This study explored the association between psychological strengths and perceptions of being a victim of a bullying relationship in the school environment. Using self-report questionnaires with grades 7 and 8 students, the role of psychological strengths as potential protective factors against various forms of bullying were examined including the patterns of strengths associated with the bullying experience. The results showed no significant association between global indices of strengths and perceptions of victimization. However, significant relationships did emerge between specific strengths and victimization. Strengths in school functioning among boys but not girls and strengths in personality functioning for both sexes were associated with lower perceived victimization. In contrast, strengths in spiritual and cultural identification were associated with perceptions of increased victimization. The implications of these results for anti-bullying strategies are discussed.

Cette étude a porté sur l’association entre les forces psychologiques et les perceptions d’être victime d’intimidation à l’école. En nous appuyant sur des questionnaires d’auto-évaluation auprès d’élèves en 7e et 8e année, nous avons examiné le rôle des forces psychologiques comme facteurs potentiels de protection contre diverses formes d’intimidation. L’étude a également porté sur les modèles de forces associés à l’expérience de l’intimidation. Les résultats n’ont indiqué aucune association entre les indices globaux de forces et les perceptions de l’intimidation. Toutefois, des relations significatives sont ressorties entre des forces spécifiques et l’intimidation. Des forces relatives à l’école chez les garçons mais pas les filles, et des forces relatives à la personnalité chez les garçons et les filles, étaient associées à une perception amoindrie de la victimisation. Par contre, des forces relatives à l’identification spirituelle et culturelle étaient associées à des perceptions accrues de victimisation. Nous discutons des répercussions de ces résultats sur les stratégies contre l’intimidation.

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One of the most distressing events for a student is being the victim of a bullying relationship. Reports on the effects of bullying show that victims experience a wide range of adjustment problems including depression, anxiety, and low self-esteem (Hawker & Boulton, 2000; Smith, 2004), physical health problems (Kumpulainen et al., 1998), avoidance of general and novel social situations (Crick & Bigbee, 1998; Storch & Masia-Warner, 2004), poorer health-related quality of life (Wilkins-Shurmer et al., 2003), absenteeism from school (DeRosier, Kupersmidt, & Patterson, 1994), and school adjustment difficulties (Arseneault et al. 2006). Moreover, some victims have been known to retaliate with extreme violence toward their aggressors, which may result in large-scale tragedies such as school shootings (Kimmel & Mahler, 2003). Thus the effects of bullying at school can be debilitating to the victims.

Unfortunately, bullying is a significant social problem (Craig & Pepler, 2007), and although anti-bullying programs have been widely implemented by schools (Smith, Cousins, & Stewart, 2005), their success rates have been mixed and often modest (Baldry & Farrington, 2007; Ferguson, San Miguel, Kilburn, & Sanchez, 2007; Pepler, Smith, & Rigby, 2004). Certainly the components that comprise anti-bullying programs vary widely, resulting in difficulties in assessing their overall effectiveness (Baldry & Farrington). However, it is also the case that the group of students identified as victims of bullies are heterogeneous in areas such as their personal characteristics, family support, and academic profiles. Thus although school-based programs may have some merit in addressing bullying, a more individualized approach that is tailored to the needs of students may be more efficacious in preventing and resolving instances of bullying. One area that may offer guidance for teachers and administrators in terms of intervention is in the recognition of the psychological strengths that students possess. Strengths, or beneficial and adaptive personal competences and characteristics, are assumed to be present to some degree in every student (Epstein, Mooney, Ryser, & Pierce, 2004) and may be assets that can be used to avoid or address bullying and its consequences. Little is known, however, about the relationship between psychological strengths and bullying. Thus the current study sought to explore the relationship between psychological strengths and perceived risk of victimization among middle school students.

Bullying, or peer victimization, differs from normal day-to-day schoolyard conflicts. One of the most important distinctions is the repetition of the abuse by others: “A student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other students” (Olweus, 1993, p. 9). Another significant element of the bullying relationship is the assertion of power through aggressive acts (Craig & Pepler, 2003; Rigby, 2002). According to Craig and Pepler, the power dynamic in the bully-victim relationship becomes polarized over time, with the bully becoming more powerful and the victim less so as the relationship continues. A study by Naylor, Cowie, and del Rey (2001) confirmed that these power relationships are keenly felt by students. Naylor et al. surveyed 1,835 students in the United Kingdom about their understanding of bullying, victimization, and coping mechanisms. Consistent with Craig and Pepler’s argument, participants iden-
tified a power component as being one of the main characteristics of bullying relationships.

The existing literature indicates that bullying can assume many forms (Naylor et al., 2001). Bullying is most often understood as falling into one of two broad categories: overt aggression, which is directly evident to the victim and observers, and covert aggression, which is more subtle and insidious in nature. Physical bullying, which includes physical abuse from one child to another such as punching, shoving, or kicking is the most obvious form of overt aggression. Another is verbal victimization such as name-calling, taunting, and teasing (Craig & Pepler, 2003; Naylor et al.). Although verbal bullying can be subtle at times and less evident to an observer, it nevertheless represents an overt attack delivered directly to the intended victim.

In contrast, relational bullying is a more covert and subtle form of aggression or victimization (Craig & Pepler, 2003; Naylor et al., 2001; Rigby, 2003; Woods & Wolke, 2004). Relational bullying more specifically addresses social exclusion and social manipulation and includes bullying by threatening or actively attempting to injure the intended victim’s network of social supports or by attempting to alter the victim’s social standing in his or her social environment. An investigation by French, Jansen, and Pidada (2002) into relational bullying among United States and Indonesian adolescents found that this type of bullying was more common in female than male bullying relationships in both the US and Indonesia, suggesting important sex differences in bullying behaviors and victimization.

Rigby (2003) suggests that the goal of relational bullying is to weaken the victim’s relationships with others. The effects of this type of abuse, although perhaps not immediately visible to others, can be thoroughly devastating to the victim. Without adequate social supports, a victim can have fewer points of assistance during any subsequent instances of bullying, which could potentially be threatening to his or her health if the victimization becomes physical in nature. Social bullying often takes the form of note-passing, rumor-spreading, or threatening one of these activities. Even when no other students are physically present, students may encounter social bullying: students who use instant messaging programs, play video games over the Internet, or participate in other online activities are also vulnerable to social victimization.

Although much attention has been directed at the pathological elements of bullying relationships, Seligman and Csikszentmihalyi (2000) describe a recent trend in the field of psychology described as positive psychology that may offer another way of conceptualizing victims and bullies. Proponents of positive psychology such as Seligman and Csikszentmihalyi call for a shift in focus from traditional clinical approaches, which tend to view clients as “broken” or revealing deficits, to a focus on people’s strengths. Rhee, Furlong, Turner, and Harari (2001) echo this sentiment and suggest that “the traditional medical model concerning problem assessment and remediation is limited in both the scope and nature of information it can provide” (p. 5). Seligman and Csikszentmihalyi suggest that by amplifying clients’ strengths, psychologists may be able to prevent certain disorders or emotional difficulties from ever becoming problematic in the first place.
A strength-based approach has been described as what measures and uses qualities or characteristics that “create a sense of personal accomplishment; contribute to satisfying relationships with family members, peers and adults; and promote one’s personal, social, and academic development” (Epstein & Sharma, 1998, p. 3). The underlying assumption of the strengths approach is that all children have strengths (Epstein et al., 2004) and that strengths are an internal resource that can assist a child in dealing with issues of life (Rawana & Brownlee, 2009). This latter point is firmly entrenched in the resiliency literature (Donnon & Hammond, 2007).

However, the link between strengths and bullying is not clear and a greater understanding of the associations and patterns between these two variables is necessary for further conceptual development and applications to the problems of bullying.

Although the body of research into bullying and victimization from a strengths perspective is sparse, there have been some investigations into the relationship between related constructs. A number of studies have indicated that students with more strengths have fewer disciplinary referrals for verbal and physical aggression at school (Albrecht & Braaten, 2008) and engage in less physical fighting generally (Aspy et al., 2004; Leffert et al., 1998; Murphey, Lamonda, Carney, & Duncan, 2004). More specifically, Farmer et al. (2005) conducted a study that examined the relationship between strengths and the presence of behavioral and emotional disorders in rural African-American adolescents, which included information on bullying. Strengths were measured using the Behavioral and Emotional Ratings Scale (BERS, Epstein & Sharma, 1988). Farmer et al. found that for girls, school grades, popularity, and leadership were positively associated with high scores on the strengths measure. Among boys, high levels of overall strengths were positively associated with higher grades. Of particular note, a negative association was found between levels of strengths and bullying behavior as well as between levels of strength and being victimized. This finding suggests that higher levels of psychological strengths may help prevent students from playing a role on either side of a bullying relationship.

The current study sought to investigate the relationship between psychological strengths and being victimized for students in a school environment. Although Farmer et al.’s (2005) findings contributed preliminary information on victimization, their study focused primarily on the aggressors in a bullying relationship. An exploration of the relationship between the experience of victimization and strengths would further contribute to an understanding of the complex phenomenon of victimization.

The current study hypothesized that students whose personal experiences reflected high levels of victimization would reveal fewer overall strengths. Sex differences in bullying and strengths were also examined in this study given the differences in types of bullying between the sexes that have been reported (Björkqvist, Lagerspetz, & Kaukiainen, 1992; Kristensen & Smith, 2003; Underwood, 2002). The role of strength in understanding the experience of victimization is likely not only to be affected by the number of strengths, but also by the configurations of specific strengths. Accordingly, in this study we examine the patterns of strengths associated with the bullying experience.
Method

Participants
This study was completed with a sample of grades 7 and 8 students enrolled in three public schools that were randomly selected in a school board in a small urban city in northwestern Ontario. The sample was composed of 48 boys and 37 girls (N=85).

The mean age of boys in the study was 12.96 years with a standard deviation (SD) of .74 years. The mean age of girls was 12.92 with an SD of .68 years. There was no significant difference between the mean age of the participants, t(83)=.251, p>.250. Grade 8 students made up a small majority, composing slightly over 56% of the sample. No grade data were available for four participants. All students were provided time away from their regular coursework in order to fill out the self-report questionnaires.

Participants were recruited by sending parental consent forms home with students in grades 7 and 8. Those students whose parents returned signed forms were given the choice to give their own assent to take part in the study by filling out a separate form.

Materials
All data were obtained via the use of self-report measures. Self-report tools were used because some of the types of victimization (e.g., relational bullying) may be difficult for observers to recognize and individual interviews were not feasible. Self-report measures have been recommended as the assessment of choice when making larger-scale generalizations about bullying (Donnon & Hammond, 2007).

Because a central goal of this study was to understand students’ recent histories of victimization, a modified version of Mynard and Joseph’s (2000) Multidimensional Peer-Victimization Scale (PVS) was administered to the students. The Multidimensional PVS is a measure that includes 16 items that assess victimization, which can be broken down into four main factors: Physical Victimization, Verbal Victimization, Social Manipulation, and Attacks on Property. This tool requires students to indicate how often a particular type of victimization occurred over the school year by placing a checkmark in one of three boxes (not at all, once, more than once). The tool was modified in this study to encompass only the last two months of experience, as opposed to experiences over the last year. This modification was made to ensure that students’ self-reports would be based on their recent memories of events.

The Multidimensional PVS is a useful and valid tool in the assessment of victims’ experiences with bullying. Aside from the good face validity of the Multidimensional PVS’s items, the instrument has been examined for convergent validity (Mynard & Joseph, 2000). The measure was shown to have convergent validity, as the results of their research indicated that students’ responses on the Multidimensional PVS were consistent with expected victimization rates for males and females across bullying subtypes. In addition, when compared with self-reports of victimization or non-victimization, the measure showed a significant ability to discriminate between groups in all four bullying categories.

Two self-report measures aimed at assessing a broad array of strengths were also administered to the students. First among these was the student
version of the Behavioral and Emotional Rating Scale, 2nd edition (BERS-2, Epstein & Sharma, 2004). The BERS-2 is a widely used assessment tool that measures strengths across five general factors (interpersonal, intrapersonal, school functioning, family involvement, and affective strengths). This measure is one of the most common assessment tools available for strengths assessment, and has been validated in various school-age populations (Trout, Ryan, La Vigne, & Epstein, 2003).

Studies of the BERS-2 have shown that the measure has acceptable convergent validity with other self-report measures, as well as test-retest reliability (Epstein et al., 2004). Epstein et al. demonstrated the convergent validity of the measure by comparing the BERS-2 with other validated self-report measures in a population of grades 6 and 8 students. For example, scores on the BERS-2 were negatively correlated with scores on the problem scales of the Youth Self-Report (Achenbach, 1991).

As the BERS-2 employs forms for multiple informants, inter-rater agreement has been examined. Synhorst, Buckley, Reid, Epstein, and Ryser (2005) conducted a study of the agreement between the self-report form and the parent report form. They found a moderate to high agreement between the scales, which suggests that the self-report version of the BERS-2’s assessment of strengths in adolescents is congruent with assessment by the adolescents’ parents. The implication of Synhorst et al.’s research is that self-report forms provide insight into students’ strengths that is as valid as strengths assessments completed by their significant adult others.

The BERS-2 applies the same measure and concepts to all ages of children. However, as children mature, a greater range of opportunities arises for the development of strengths such as being able to achieve success in a work environment. Similarly, bullying takes on a more diverse presentation as children develop through adolescence. One tool that offers this range of information on strengths is the Strength Assessment Inventory (SAI; Rawana, Brownlee, & Hewitt, 2004), which includes nine domains of strength. These domains are: (a) family/home functioning, (b) school functioning, (c) leisure and recreation, (d) peer functioning, (e) personality functioning, (f) community involvement, (g) spiritual and cultural identity, (h) future goals and aspirations, and (i) personal and physical care. The SAI assesses several domains of strength not strictly included in the BERS-2 such as spiritual and cultural identity, leisure and recreation, and community involvement. Therefore, the SAI was also included in the current study to achieve a breadth of strengths behaviors and characteristics.

Support for the validity of the SAI has been demonstrated by Cartwright (2002) who used an early version of the SAI and found evidence for construct validity in that strength was inversely related to problematic behaviors. Similarly, Pye (2006) reported predictive validity in an association between higher scores on the SAI and fewer behavior problems among younger children. Thus because of its apparent ability to assess several domains of strength not specifically included in the BERS-2, such as spiritual and cultural identity, leisure and recreation, and community involvement, the SAI was also included in the current study.
Procedure
In collaboration with school administrative and teaching staff, times were arranged that provided students with an opportunity to complete the measurement tools. Participating students were given the questionnaires in a group administration during regular class time. The surveys took most students between 40 minutes and one hour to complete. One of us supervised completion of the measures, and we provided assistance to the students in completing the measures when necessary.

Results

Strength and Victimization
A sex difference was found for physical victimization. A Levene’s test for equality of variances was significant \( F=8.623, p<.01 \); thus equal variances of the groups were not assumed. Boys emerged as significantly more likely to be physically victimized than girls, \( t(76.87)=-1.404, p<.01 \). These findings tend to be consistent with earlier research reporting that the sexes experience being bullied in diverse ways (Björkqvist et al., 1992; Kristensen & Smith, 2003; Underwood, 2002). However, no significant sex differences were found for the other subtypes of bullying.

In addition, types of victimization were significantly correlated with each other and overall victimization (see Table 1). The lowest correlation between victimization subtypes was between verbal victimization and physical victimization, \( r(79)=.495, p<.01 \), and the strongest was between verbal victimization and social victimization, \( r(80)=.629, p<.01 \). These findings suggest that students who are bullied, regardless of sex, are targeted in numerous ways.

In order to determine whether greater strengths predicted lower victimization, regression analyses were conducted using the BERS-2 Strength Index and the SAI Strength Quotient as well as total victimization scores. Neither the BERS-2 Strength Index nor the SAI quotient were able to predict victimization at an acceptable level of significance, although the BERS-2 Strength Index showed a slight trend toward such a relationship, \( r^2=.04, F(1, 72)=3.52, p<.10 \). It is possible that a significant association between overall strengths and victimization would emerge with a larger pool of participants. However, it is reasonable to assume that some specific strengths, rather than overall strengths, may function as a protective factor against victimization for a particular student; therefore, the relationship between victimization and specific strengths was examined.

Individual strength subscales were next examined to determine whether they were predictive of victimization. High scores on the BERS-2’s School Functioning subscale were predictive of low total victimization, \( r^2=.107, F(1, 72)=8.662, p<.01 \), although no other BERS-2 subscales predicted victimization. Similarly, the SAI’s School Functioning subscale was also a significant predictor of low victimization, \( r^2=.06, F(1, 72)=5.185, p<.05 \). Similar research conducted with a larger sample may reveal larger effect sizes for School Functioning’s prediction of victimization.

Because the means of male and female students differed on the School Functioning subscale, \( t(82)=-2.692, p<.01 \), the ability to predict total victimization using School Functioning scores was examined for both sexes. The results of the regression equation showed that the score on the School Functioning...
subscale was a significant predictor of victimization for male students, $r^2=.105$, $F=(1, 38)=4.469$, $p<.05$, but not for female students, $r^2=.029$, $F=(1, 32)$, $p>.05$. These results suggest that strengths in school performance may serve to protect only boys from being bullied.

After examining the predictive properties of the School Functioning subscale in isolation, a second multiple regression was conducted, this time with all the SAI’s subscales. Interestingly, when all the SAI’s subscales were entered simultaneously into the regression analysis, the effect of School Functioning appeared to be masked by the other subscales. However, the regression equation remained significant, $r^2=.286$, $F(9, 52)=2.311$, $p<.05$. The two variables that emerged as significant predictors in this particular regression equation were the personality functioning and spiritual and cultural Identity subscales. The means of male and female students on these subscales did not significantly differ from one another.

An intriguing aspect to this last finding calls for some further research. High scores on the Personality Functioning subscale predicted lower total victimization. This relationship is not especially surprising; it is reasonable to suspect that possessing a variety of strengths in personality functioning makes students poor targets for bullying, as they may be less reactive or provocative than students who do not have many strengths in this area. The emergence of spiritual and cultural strengths as a significant predictor of victimization was somewhat unexpected. Possible explanations for this finding are discussed below.

**Discussion**

Some of our predictions were supported by students’ responses on self-report questionnaires. Arguably the most important knowledge stemming from this study is the ability of individual-strengths subscales to predict the level of bullying experienced by respondents, which warrants some further discussion. Strong school functioning (as measured by both the BERS-2 and the SAI) may lead to lower frequencies of victimization in males. Items on these strengths subscales include attending classes regularly, completing work on time, study-
ing for tests, and paying attention in class. Boys who are successful in these areas are likely to be doing well academically and to have confidence in their abilities, thus rendering them less likely either to be targeted or to succumb to bullying. Boys who do not have strengths in school functioning are probably doing more poorly academically and displaying classroom behaviors that are less desirable. These characteristics may make these students more attractive to bullies. It is also possible that the students who possess many school functioning strengths simply devote more time to academic pursuits, leaving them physically removed or unavailable to those who would choose to abuse them.

One of the most unexpected results of this study was that high levels of spiritual and cultural strengths, as assessed by the SAI’s Spiritual and Cultural Identity subscale, were predictive of increased victimization. One observation that can be made is that possessing certain strengths may not be advantageous in all situations. In the case of bullying, spiritual and cultural strengths actually appear to be related to being victimized. One possible explanation for this finding is that students who possess high levels of spiritual strengths may be less likely to retaliate against aggressors. As such, they could become easy targets for the bullies. Similarly, a high investment in cultural values and practices may draw negative attention to a student if other students from the majority culture see the student as different and in some way a target for discrimination.

The finding that there were correlations between various types of bullying bears repeating. The implication of this finding is that victims of bullying are victimized in several ways. Thus if a student is seen being bullied physically, there is a real possibility that he or she will be victimized relationally, verbally, or have his or her property damaged. Educators must examine the bullied student’s situation with the possibility that other types of victimization may also be occurring.

Some of these results are reminiscent of those obtained by Ma (2001) regarding the relationship of academic press to bullying. It is probable that schools with higher academic press tend to foster academic and school functioning strengths in the students. This appears to be an example of one’s environment directly influencing the strengths that one possesses. However, although this article presumes that strength is the predictor variable and bullying is the criterion, as is usually the case in the literature that examines personal characteristics as protective factors (Cassidy & Taylor, 2005; Donnon & Hammond, 2007; van Hoof, Raaijmakers, van Beek, Hale, & Aleva, 2008), an outstanding issue in theory development is the directionality of influence. Is the presence of strengths responsible for less victimization, or does being bullied lead to a reduced perception of possessing certain strengths or even a reduction in actual strengths? Future research and theory development should address the interrelationships of these variables and the directionality of influence.

Several possible issues in the current study may affect the validity of the study and make it difficult to generalize the results. The inability to recruit a larger pool of participants probably played a role in the failure to observe all predicted group differences. Differences in some key analyses approached significance such as the BERS-2’s ability to predict high or low victimization in
the participants. With the additional power afforded by a larger pool of participants, we suspect that more significant differences would emerge.

In addition, the version of the Strengths Assessment Inventory (Rawana, Brownlee, & Hewitt, 2004) used in the analysis has since been refined, and several improvements were made on the instrument during the latest revisions. It is possible that the data on the students’ strengths, from the SAI at least, were not as accurate as they might have been with the revised instrument. Similarly, Mynard and Joseph’s (2000) Multidimensional Peer Victimization Scale was modified slightly from its original version. This fact, coupled with the use of only one measure of victimization, may be part of the reason there was no significant relationship between victimization and overall strengths. These issues, combined with a larger sample size, may reveal a stronger relationship between the constructs of victimization and overall strength, which could be addressed in future research.

Some of the administrators involved in the study suggested that a strong effort was being made against bullying in their schools. If other schools with a more tolerant approach to bullying had been randomly selected, the inclusion of their students might have yielded different levels of victimization. As noted, Dearden (2004) found that the school’s approach to bullying, if responsive and expressly willing to listen to students’ relevant concerns, serves as a protective factor against peer victimization. It might have been appropriate to include a measure that assessed the students’ perceptions of their school’s approach to bullying and the extent to which it reflected a strengths-oriented school climate.

The repercussions of bullying extend well beyond the bully and victim. Teachers, administration, and mental health resources are all channelled toward fixing this pervasive problem, yet to date little attention has been given to the idea that focusing on developing strengths may ease the tension of a classroom bullying relationship. A number of future research possibilities are suggested by the current findings. As no causality can be inferred from these findings, a study using an experimental design may illuminate the advantages, if any, of a strength-based anti-bullying campaign. Such a model would probably take much longer to investigate.

This study focused on victims and their strengths. It may be of interest to study bullies themselves from a strengths-based perspective. It is possible that bullies may have common areas of strength that are being expressed negatively. By fostering these strengths and instructing the students on how to express and develop them constructively, it is possible that the bullies may be encouraged to abandon their aggressive behavior in favor of more positive pursuits. As well, there is some evidence that a reciprocal victim-bully cycle exists in middle school. Strengths may play a role in the dynamic of this cycle, and this possibility should be examined in a future study.

Staying true to a theme in this study, efforts should be made to understand and incorporate the strengths of individual students into anti-bullying program planning and classroom management in schools. The process of working with students who act as bullies, victims, or both to identify strengths can promote positive behavior change. This identification process can also better inform interventions that can work with individual student characteristics
rather than a whole-school approach that may be less successful. As well, using positive behavior strategies in classrooms that are guided by the strength approach may encourage bullies and victims to channel their skills into more adaptive areas, thus ending the cycle so prevalent in our schools.

References
The Relationship Between Strengths and Bullying


